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100/300 AREA UNIT MANAGERS MEETING
APPROVAL OF MINUTES
July 12, 2007

APPROVAL: _____ Date 8/9/07
Stacy Charboneau, DOE/RL (A3-04)
River Corridor Project Manager

APPROVAL: _____ Date 8/9/07
Briant Charboneau, DOE/RL (A6-33)
Groundwater Project Manager

APPROVAL: _____ Date 9-Aug-2007
John Price or Rick Bond, Ecology (H0-57)
Environmental Restoration Manager or D4
Manager

APPROVAL: _____ Date Aug 9, 2007
Larry Gadbois, Rod Lobos, or Dennis
Faulk, EPA (B1-46)
100 Aggregate Area Unit Manager

APPROVAL: _____ Date Aug 9, 2007
Alicia Boyd, EPA (B1-46)
300 Aggregate Area Unit Manager

100/300 AREA UNIT MANAGER MEETING
ATTENDANCE AND DISTRIBUTION
July 12, 2007

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100 & 300 AREA UNIT MANAGER MEETING MINUTES

Groundwater, Source Operable Units, Facility (D4 and ISS), and End State and Final Closure

July 12, 2007

Washington Closure Hanford (WCH) Building, 2620 Fermi Drive, Richland, Washington

ADMINISTRATIVE

- Next Unit Manager Meeting (UMM) - The next meeting will be held August 9, 2007 at the Washington Closure Hanford (WCH) Office Building, 2620 Fermi Avenue, room C209.
- Attendees/Delegations - Attachment A is the list of attendees. Representatives from each agency were present to conduct the business of the Unit Managers Meeting. Attachment B documents any delegations received from the agencies.
- Approval of Minutes – The June 14, 2007 meeting minutes were approved by the U.S. Environmental Protection Agency (EPA), Washington State Department of Ecology (Ecology), and U.S. Department of Energy, Richland Operations Office (RL).
- Action Item Status - Status of action items was performed, and updates provided (Attachment C).
- Agenda: Attachment D is the meeting agenda.

EXECUTIVE SESSION (Tri-Parties Only)

- Vadose Zone Characterization and How It Relates To Waste Site Closeout

Issue: RL noted that Ecology has not approved the waste site reclassification (to interim closed out) for the 100-D-30, 100-D-56. RL questioned whether Ecology is changing the overall cleanup verification processes. Ecology stated they are not changing processes, but responding to site-specific conditions at these two waste sites. Ecology observed that the situation at these two wastes sites is similar to the situation for the 1301-N waste site.

Action: Ecology is sending RL a letter requesting additional work or modification to work (additional sampling): as described in the Hanford Federal Facility Agreement and Consent Order Article XXX for the 100-D-30 and 100-D-56 sites.

100/300 AREA GROUNDWATER

Attachment 1 provides a status or information. No issues were identified.

Clarification: Ecology requested RL explain why there is a delay in the July 2007 field test regarding the injection of micron-size iron into the In-Situ Redox Manipulation (ISRM) barrier as referenced in Attachment 1. RL provided clarification: that the source of iron used was not reactive. RL plans to do laboratory tests of two other iron sources before proceeding to field tests. Ecology asked RL to confirm whether the field tests were "unfunded" and RL confirmed that they are unfunded because the cost of the work to date exceeds the baseline estimate.

Action 1: RL will provide EPA with the next steps regarding the recent discovery of chromium at the KE area; specifically the results for well 199-K-141 and 199-K-142.

Action 2: RL will provide EPA with a copy of the 30% design for the 100-KR-4 expansion.

Agreement 1: Attachment 2 documents EPA and RL concurrence on the "100-KR-4 Pump and Treat Expansion Summary Package," dated July 12, 2007.

Agreement 2: Attachment 3 proposes specific changes to document DOE/RL,-2000-41, Rev. 1, Appendix A on the 100-NR-2 aquifer tubes. Ecology approved the changes.

Agreement 3: Attachment 4 documents Ecology's approval of "Sampling and Analysis Instructions for Investigation Chromium Groundwater Contamination in the 600 Area Between 100-D and 100-H," SGW-33224, Rev. 0. Ecology also re-iterated in the meeting approval to proceed with the Horn investigation.

GROUNDWATER/SOURCE INTEGRATION

No issues were identified, no agreements were documented, and no actions were documented.

100/300 AREA FIELD REMEDIATION CLOSURE

Attachments 5 provide a status or information for various projects in the 100/300 Area Field Remediation (FR) Project. Attachment 5 covers the 100-B/C Area. No issues were identified, and no agreements were documented.

Action: RL schedule a briefing with Ecology in October 2007 on the piping near the 1310-and 1322-NB buildings. This action is a clarification to the existing action item 100-128.

DEACTIVATION, DECONTAMINATION, DECOMMISSION, DEMOLITION (D4)/ INTERIM SAFE STORAGE (ISS)

Attachment 6 provides a status or information for the 300 Area, while Attachment 7 provides a status or information for the 100 Area. No issues were identified, no actions were documented, and no agreements were documented.

END STATE AND FINAL CLOSURE PROJECT

Attachment 8 provides a status or information. No issues were identified, no agreements were documented, and no actions were documented.

Issue: EPA provided RL with a copy of a letter titled, "Additional Polychlorinated Biphenyl (PCB) Analysis for the 100 and 300 Area Component of the River Corridor Baseline Risk Assessment"(Attachment 9). RL indicated they would review the letter and follow-up with the regulatory agencies.

SPECIAL TOPICS

- EPA Requests Information from RL for National Tracking

Action: EPA requested information for each operable unit on the following areas: 1) total operable unit acreage/boundary map, 2) waste site acreage within each operable unit, and 3) acreage within each operable unit that is cleaned up. Additional discussions are expected on this subject.

Attachment A

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Attachment B

Attachment C

100/300 Area UMM
Action List
July 12, 2007

Open (O)/ Closed (X)	Action No.	Co.	Actionee	Project	Action Description	Status
X	100-003	RL	K. Bazzell	Field Remediation Closure	EPA and Ecology request DOE prepare a schedule for cleanup of the 200-CW-3 waste sites listed in the 100 Area Remaining Site Record of Decision.	Open: 7/13/06; Action: Closed 12/14/2006.
X	100-004	WC	L. Dittmer	Sample Design and Cleanup Verification	Present an errata sheet to provide consistent tritium cleanup levels between the 100 Area Burial Ground SAP and the 100 Area SAP.	Open: 7/31/06; Action: Closed 11/9/2006.
X	100-005	RL	K. Bazzell	General RCCC	EPA and Ecology request a meeting with the DOE person who can approve/disapprove language in the 100 Area Remedial Design Report. (Action associated with a proposed revision to the RDR to include descriptive language on ecorisk screening.)	Open: 7/13/06; Action: Closed 11/9/2006.
O	100-005B	EPA	J. Zeisloft	General RCCC	Revise the 100 Area RDR to include more specific language on the methodology and process for conducting ecological risk screening during closeout process.	Open: 9/14/06; Action: After several attempts to reach agreement, a workshop was scheduled with RL, EPA, and Ecology on August 21, 2007 to resolve.
X	100-006	RL	J. Zeisloft	100-K Field Remediation	RL to provide EPA and Ecology a copy of the NorthWind Characterization Report for 118-K-1.	Open: 7/13/06; Action: Completed 10/26/06
X	100-007	RL	J. Zeisloft	100-K Field Remediation	RL provide EPA and Ecology the status of the AMEC Report on 118-K-1.	Open: 7/13/06; Closed: 8/10/06 Action did not occur

100/300 Area UMM
Action List
July 12, 2007

Open (O)/ Closed (X)	Action No.	Co.	Actionee	Project	Action Description	Status
X	100-008	RL	K. Bazzell	Field Remediation	Provide WCH direction to evaluate other, existing, options for handling bottles containing liquids that are unearthed during remedial actions. Evaluate what is being done at other sites (Brookhaven; Sandia; DOE Lessons Learned website); evaluate how HAZM	Open: 9/14/06; Action: Competed 10/2/06
X	100-009	RL	R. Guercia	100-K D4	Send a copy of a building completion report (a quarterly report prepared to satisfy the DOE Order to take a facility "off the books.") as an alternate format of retrievable documentation.	Open: 9/14/06; Action: Complete 9/15/06
X	300-002	PN	B. Peterson M. Hartman	300-FF-5 Groundwater	Invite Jacqui Shea (Ecology), Alica Huckaby (Ecology), Alicia Boyd (EPA) to the September 300 Area aquifer tube sampling event.	Open: 7/13/06; Action: Completed 9/5/06
X	100-110	ECY	J. Price	100-H	John Price (Ecology) will send Kent Westover (RL) an email after looking at the information on the 116-H-4 table provided at the 10/12/06 UMM.	Open: 10/12/06; Action: Completed 10/13/06
X	100-111	RL	K. Westover	RCC General	RL shall propose a process for resolving sampling approaches where Ecology and RL differ, and multiple attempts at a technical level are exchanged without resolution.	Open: 10/12/06; Action: Ecology and RL agreed to close item; action closed 2/8/07.
X	100-112	RL	B. Charboneau	100-HR-3	RL will respond to Ecology's email request on the data and analysis request regarding the 100-HR-3 system.	Open: 10/12/06; Action: Data was provided, & Ecology is reviewing. On 4/12/07 this action was closed and a new action item generated (see action item 100-133).

100/300 Area UMM
Action List
July 12, 2007

Open (O)/ Closed (X)	Action No.	Co.	Actionee	Project	Action Description	Status
X	100-113	ECY	J. Price	100-HR-3	John Price will respond to RL's request to submit an annual report for the ISRM system versus a quarterly report. However, monthly data will still be sent to Ecology.	Open: 10/12/06; Action: Ecology approval documented in minutes. Completed 11/9/2006.
X	100-114	RL	B. Charboneau	Unknown	RL will send Ecology the schedule for the EM-22 Treatability Test Report	Open: 10/12/06; Action: Schedule entered into minutes. Completed 11/9/2006.
X	100-115	RL	B. Charboneau	100-D	RL will send Ecology the plans/actions for the 182-D Reservoir.	Open: 10/12/06; actions documented in minutes. Completed 11/9/2006.
X	100-116	RL	J. Zeisloft	100-D	RL and Ecology shall talk about the liquid removal from the 100-D-56 pipe.	Open: 10/12/06; Action: Completed 11/9/2006
X	100-117	ECY	J. Price	100-N	Ecology shall review the revegetation proposal for the 116-N-1 site and provide feedback.	Open: 10/12/06; Action: Proposal approved in minutes. Completed 11/9/2006.
X	100-118	ECY	J. Price	100-D	Ecology shall review the 100-D-56 chromium treatment plan	Open: 10/12/06; Action: Ecology submitted comments. Completed 11/9/2006.
X	300-003	RL	C. Smith	300-FF-2	RL shall provide EPA with the contamination control measures to move the MO-905 trailer within the onsite area.	Open: 10/12/06; Action: Completed 10/18/2006

100/300 Area UMM
Action List
July 12, 2007

Open (O)/ Closed (X)	Action No.	Co.	Actionee	Project	Action Description	Status
X	100-119	RL	J. Morse	100-HR-3	RL (John Morse) will set up a meeting with Ecology (John Price) on overall long-term picture for 100-HR-3.	Open: 11/9/06; Action: RL is scheduling a meeting in March 2007. On 4/12/07 this action was closed and a new action item generated (see action item 100-133).
X	100-120	RL	J. Morse	100-HR-3	RL (John Morse) will provide Ecology (Mandy Jones) with the 100-D well installation schedule, as well as the EM-22 Treatability Test well installation plans.	Open: 11/9/06; Action: RL to set up meeting in March 2007 to provide the schedule. On 4/12/07 this item was closed.
X	100-121	RL	J. Morse	100-FR-3	RL (John Morse) will provide EPA (Rod Lobos) with the Contaminates of Concern (COCs) plot for each well in 100-FR-3, including a list of wells sampled in October 2006 and those scheduled to be sampled in November 2006.	Open: 11/9/06; Action: Closed 12/14/2006
X	100-122	RL	J. Zeisloft	100-D	RL (Jamie Zeisloft) will set up a meeting with Ecology on the holistic 100-D characterization approach.	Open: 11/9/06; Action: Meeting was held; action closed 2/8/07.
X	100-123	RL	J. Zeisloft	100-D	RL (Jamie Zeisloft) will provide Ecology (Mandy Jones) with the overall 100-D project remediation schedule.	Open: 11/9/06; Action: Closed 12/14/2006
X	300-004	RL	C. Smith	618-10/11	RL (Chris Smith) will set up a meeting with EPA to discuss the M-16-67 milestone for 618-10/11 to ensure there are no issues with the design solution and completing the milestone.	Open: 11/9/06; Action: Closed 12/14/2006

100/300 Area UMM
Action List
July 12, 2007

Open (O)/ Closed (X)	Action No.	Co.	Actionee	Project	Action Description	Status
X	100-124	RL	K. Westover	General RCC	RL to evaluate whether it endorses use of analogous sites for site closeout (proposed by WCH), and communicate its opinion to Ecology and EPA. As a first step, RL will set up a meeting to focus on a current example of a waste site being proposed for closeout using this approach.	Open:12/14/06; Action: Item was closed 7/12/07.
X	100-125	RL	K. Bazzell	General RCC	RL to meet with EPA and Ecology on what systems or processes are in place to track remedial action costs for waste site closeout. Remedial Action Closeout Reports will capture this information but EPA and Ecology want to hear an update since the development of the 300-FF-1 Remedial Action Report (DOE/RL-2004-74, Rev. 0).	Open:12/14/06; Action: A summary was provided at the May 2007 UMM; closed 5/10/07.
X	100-126	RL	J.Morse	General RCC	RL (John Morse) will provide EPA with "DAVE" access.	Open:12/14/06; Action: Closed 1/11/07
X	100-127	RL	C. Smith	100-B/C	RL (Chris Smith) will provide EPA with the spent nuclear fuel disposition schedule for 100-B/C.	Open:12/14/06; Action: Closed 1/11/07
X	300-005	RL	R. Guercia	300 Area D4	RL shall provide EPA with status on the 324/327 building demolition strategy.	Open:12/14/06; Action: Closed 1/11/07
X	300-006	RL	R. Guercia	300 Area D4	The Tri-Parties will develop a process for closing out D4 actions where no known waste site is under the building, and no releases to soil are documented or expected based on existing data.	Open: 1/11/07; Action: RL will set up a meeting with EPA and Ecology to discuss. On 4/12/07 this item was closed.

100/300 Area UMM
Action List
July 12, 2007

Open (O)/ Closed (X)	Action No.	Co.	Actionee	Project	Action Description	Status
O	100-128	RL	R. Guercia	100-N	RL will schedule a briefing with Ecology in October 2007 on the piping near the 1310 and 1322-NB buildings.	Open: 1/11/07; Action: The RL point of contact person changed and the action item revised on 7/12/07.
X	100-129	RL	J. Morse	100-K	RL (John Morse) will provide EPA with a copy of "The KW Pump and Treat System Remedial Design and Remedial Action Work Plan, Supplement to the 100-KR-4 Groundwater Operable Unit Interim Action," DOE/RL-2006-52, Rev. 1.	Open: 1/11/07; Action: Closed 1/11/07
O	100-130	RL	J. Zeisloft	100 Areas	EPA and Ecology to discuss footnote in Cleanup Verification Packages/Remaining Site Cleanup Verification Packages (CVP/RSVPs) for immobile contaminates as related to the footnote stated in the Remedial Design Report/Remedial Action Work Plan for immobile contaminates.	Open: 1/11/07; Action: After several attempts to reach agreement, a workshop was scheduled with RL, EPA, and Ecology on August 21, 2007 to resolve.
X	100-131	RL	C. Smith	100 Areas	Ecology requests RL for an updated schedule on remediation designs and sampling work instructions through June 2009.	Open: 1/11/07; Action: Information provided; action closed 2/8/07.
O	100-132	RL	C. Smith	100 Areas	RL will develop proposed changes to the verification sampling approach for tritium in soil.	Open: 2/8/07; Action: After several attempts to reach agreement, a workshop was scheduled with RL, EPA, and Ecology on August 21, 2007 to resolve.

100/300 Area UMM
Action List
July 12, 2007

Open (O)/ Closed (X)	Action No.	Co.	Actionee	Project	Action Description	Status
X	300-007	RL	C. Smith	300 Area	EPA requested a meeting on 618-7 to be scheduled, and to include the Washington State Department of Health.	Open: 2/8/07; Action: Meeting was held and this item was closed on 4/12/07.
X	100-133	RL	J. Hanson	100-HR-3	RL and Fluor Hanford will schedule a meeting with Ecology to decipher data trends, and future plans for the chromium plume at the 100-H reactor.	Open: 4/12/07; Action: At the 5/19/07 UMM, RL stated a meeting has been scheduled for May 22. Meeting occurred; this item closed on 6/7/07.
O	300-008	RL	R. Guercia	100/300 Area	RL shall develop the instructions for documenting D4 completions in the 100 and 300 Areas where no known waste site is under the building, and no releases to soil are documented or expected based on existing data. These instructions shall be added into the respective Removal Action Work Plans after review and approval from the respective lead regulatory agency for the specific Removal Action Work Plans in the 100 and 300 Areas.	Open: 4/12/07; Action: Ongoing action, and are still under development.
X	300-009	RL	J. Sands	300 Area	RL will follow up with EPA on any past or future land evaluations of the southern 300 Area referred to as the "triangle area" where new construction is starting.	Open: 4/12/07; Action: Closed on 7/12/07.
O	100-134	RL	J. Zeisloft	100-D Area	RL will respond to Ecology's electronic mail message sent on April 19, 2007 regarding the 126-D-1 Ash Pit.	Open: 5/10/07; Action: RL provided Ecology data on July 2, 07, and Ecology is evaluating the data. Action remains open.

100/300 Area UMM
Action List
July 12, 2007

Open (O)/ Closed (X)	Action No.	Co.	Actionee	Project	Action Description	Status
O	100-135	RL	C. Smith	100 Areas	RL will provide a draft of the 100 Area Explanation of Significant Difference (ESD), which adds waste sites, to EPA and Ecology for review.	Open: 6/14/07; Action: A briefing with RL is scheduled for next week, with follow up with EPA and Ecology.
O	100-136	RL	C. Smith	100 Areas	RL will provide EPA and Ecology with the schedule for the next revision of the 100 Area Remedial Design Report/Remedial Action Work Plan.	Open: 6/14/07; Action: The schedule will be provided in August 07.
O	100-137	Ecology	J. Price	100-D	Ecology is sending RL a letter requesting additional work modification (additional sampling) as described in the Hanford Federal Facility Agreement and Consent Order for the 100-D-30 and 100-D-56 sites.	Open: 7/12/07; Action:
O	100-138	RL	J. Hanson	100-K	RL will provide EPA with the next steps regarding the recent discovery of chromium at the KE area; specifically the results for well 199-K-141 and 199-K-142.	Open: 7/12/07; Action:
O	100-139	RL	J. Hanson	100-K	RL will provide EPA with a copy of the 30% design for the 100-KR-4 expansion.	Open: 7/12/07; Action:
O	100-140	RL	S. Charboneau	100/300 Area	EPA requested information for each operable unit on the following areas: 1) total operable unit acreage/boundary map, 2) waste site acreage within each operable unit, and 3) acreage within each operable unit that is cleaned up. Additional discussions are expected on this subject.	Open: 7/12/07; Action:

Attachment D

100/300 Area Unit Manager Meeting
July 12, 2007
Washington Closure Hanford Building
2620 Fermi Avenue, Richland, WA 99354
Room C209
1:00-4:30 p.m.

1:00 – 1:30 p.m. **Executive Session (Tri-Parties Only):**

- Vadose zone characterization & how it relates to waste site close-out

1:35 p.m. – 2:00 p.m. **Administrative:**

- Approval and signing of previous meeting minutes (June 2007)
- Update to Action Items List
- Next UMM (08/9/2007, Room C209)

2:00 – 4: 30 p.m. **Open Session: Project Updates:**

- 100/300 Area Groundwater (John Morse/Jane Borghese)
- Groundwater/Source Integration
  - 5-year Record of Decision Review Update (Cliff Clark/Alicia Boyd)
- 100/300 Area Field Remediation and Closure (FR)
  - Sampling and FR Design (Chris Smith/Lorna Dittmer/Rich Carlson)
  - 100-N (Chris Smith/Scott Parnell)
  - 100-F (Chris Smith/Jon Fancher)
  - 300-FF-2 (Chris Smith/John Darby)
  - 618-10/11 (Chris Smith/Scott Parnell)
  - 100-B/C (Chris Smith/Dean Strom)
  - 118-K-1 (Jamie Zeisloft/Dale Obenauer)
  - 100-D (Jamie Zeisloft/Mark Buckmaster)
- D4/ISS
  - 300 Area D4 (Rudy Guercia/Donna Yasek)
  - 100 Area D4 (Rudy Guercia/Dan Saueressig)
  - ISS (Chris Smith/Dan Saueressig)
- End State and Final Closure (John Sands/Jeff Lerch/Jill Thomson)
- Special Topics

Attachment 1

100/300 Areas Unit Managers Meeting,
July 12, 2007

100-NR-2 Groundwater OU - Russ Fabre

Groundwater Monitoring

Former extraction wells and selected monitoring wells have been monitored quarterly since the pump-and-treat system was put on standby. Strontium-90 concentrations have increased in some of these wells, but the changes appear to be primarily related to changes in water levels rather than rebound caused by cessation of the pump-and-treat system. The following paragraphs and trend plots provide detail.

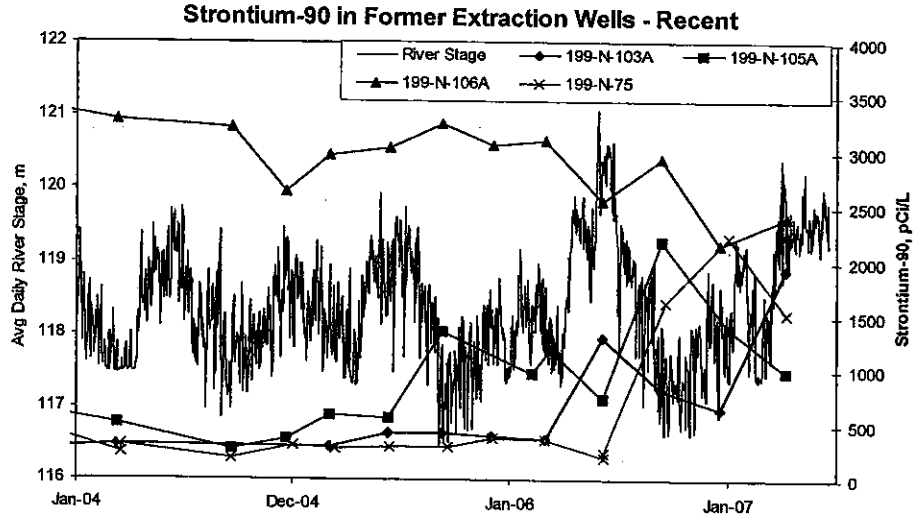
Strontium-90 concentrations in monitoring wells **199-N-2** and **199-N-67** spiked sharply in June 2006 when the water table was high. These wells are the closest to the crib, where the vadose zone is more highly contaminated. They showed more of a response in 2006 than previous years because the water rose higher into vadose due to (a) river stage higher in 2006 than it had been for years; and (b) pumps were shut off. If this explanation is correct, we'll expect to see strontium-90 levels rise in these wells in June 2007 (data not yet returned from lab). Former extraction well **199-N-103A** also showed an increase in June 2006, then declined somewhat before increasing even higher in April 2007.

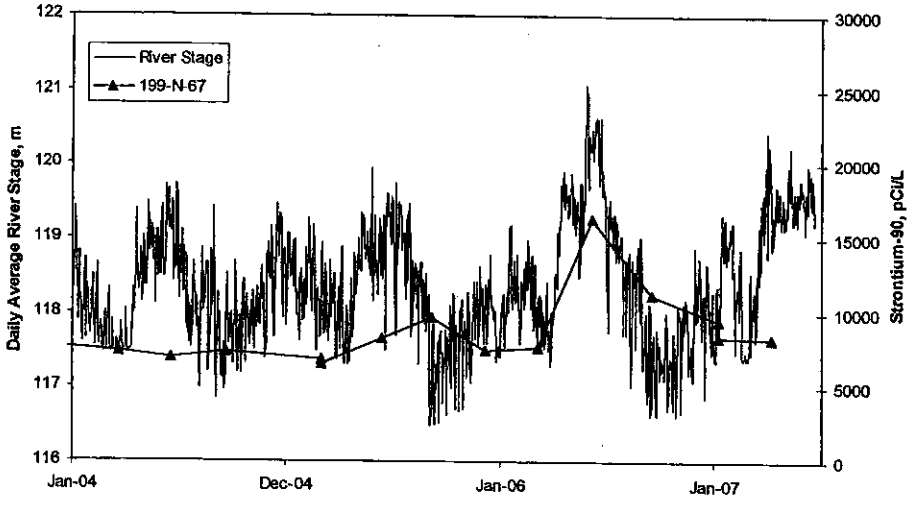
Former extraction well **199-N-105A** had a concentration peak in September 2006. Extraction well **199-N-75** also increased in September 2006, and got even higher in January 2007 before declining somewhat in April 2007 (concentrations remained higher than they were previously). Monitoring **well 199-N-76** showed increases in April 2007. This may have been a delayed response to the high water table in summer 2006 (i.e., mobilized Sr-90 moving downgradient to these wells).

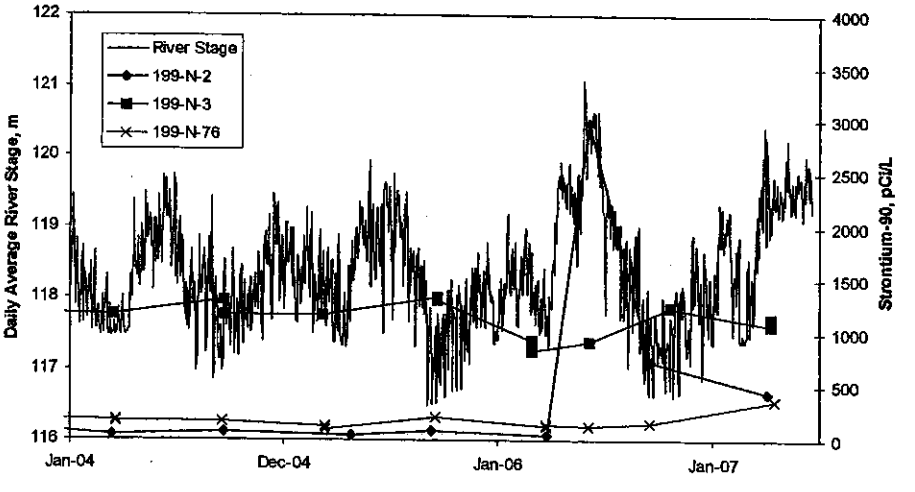
Monitoring wells **199-N-3** and former extraction well **199-N-106A** showed no rebound.

Gross alpha: In recent months we have received some elevated results for gross alpha in 100-N aquifer tubes and wells. This has been tracked to a laboratory problem. Gross beta results appear representative.

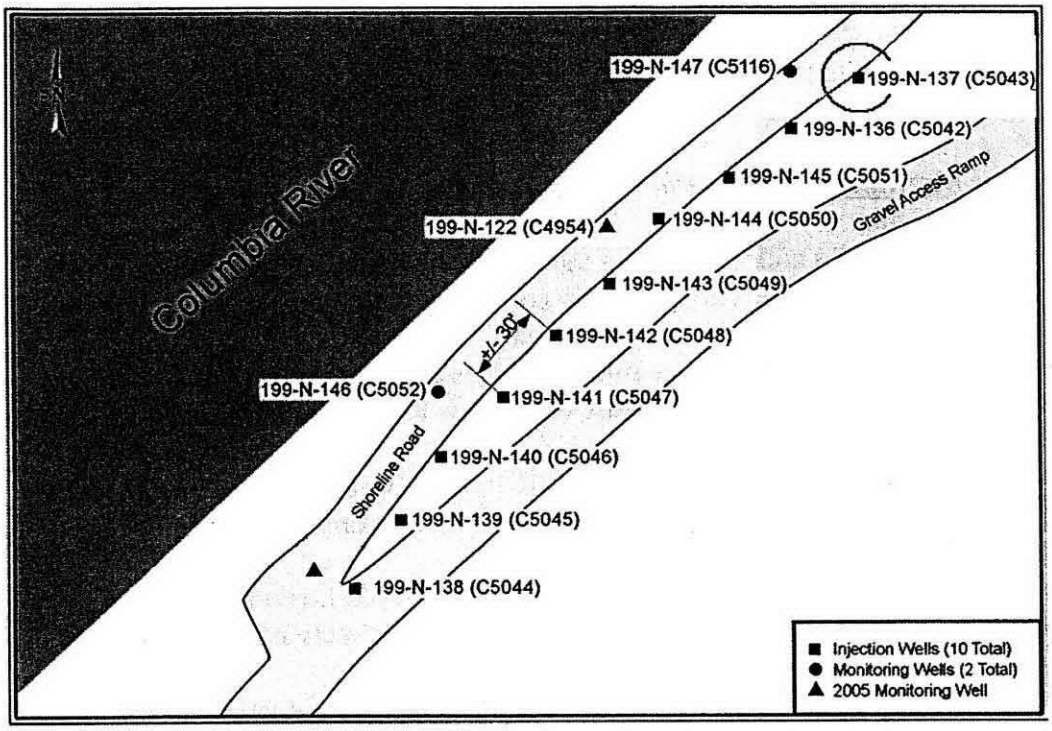
100/300 Areas Unit Managers Meeting, July 12, 2007







Apatite Barrier Injections



Ringold Formation Apatite Injections

- Completed March 2007

Hanford Formation Apatite Injections

- Injection of wells (N-140 and N-144) began on July 10th.

100-KR-4 Groundwater OU - Ron Jackson

- Remediation Treatment Status
  - For the period of June 1-30, 2007:
    - System operated normally.
    - Total average flow through the system was approximately 289 gpm.
    - Average influent hexavalent chromium concentration was 0.031 mg/L.

- KR-4 Expansion
  - Request addition of receipt for the concurrence of the K expansion briefing package that documents the proposed well locations.
  - Received EPA comments on the annotated outline for the supplement to the remedial design report/remedial action work plan for the expansion of 100-K Area treatment system.
  - Internal review of the 30 percent design (conceptual) has been completed.

- KW Groundwater Remediation
  - For the period of June 1-30, 2007:
    - System operated normally.
    - Total average flow through the system was approximately 78 gpm. The lower flow was attributed to down time associated with extraction wells K-139 and K-140 (fiber optic communication problems). The problem was fixed in June, 2007.

- Average influent hexavalent chromium concentration was 0.114 mg/L.

100-K Area Drilling Status—Ron Jackson (FH)

- The drilling of eighteen wells to support the K expansion is planned to start in late FY 2007.

100-KR-4: K-Basins Monitoring Task—Bob Peterson (PNNL)

- Leak Detection Monitoring:
  - Tritium results for samples collected during the regular quarterly sampling even in late April 2007 are available. Results are generally consistent with trends and expectations, although results at several wells near the KW reactor show small changes in trend upward (results remain below the DWS). These minor changes are likely related to shifts in the groundwater flow pattern in this area because of the new KW pump-and-treat system. There is no evidence to suggest basin leaks.
  - Monthly sampling continues at three wells close to the KE Basin (199-K-27, 199-K-29, and 199-K-109A). Results are not yet available for the June sampling, which occurred on the 22nd.
  - Historical Note: The tritium plume created by leakage from KE Basin in 1993 has now completely passed well 199-K-32A, which is located approximately mid-distance between the Basin and the river.
- Monitoring Well Network:
  - Results for the first samples from new monitoring wells 199-K-141 and 199-K-142, which were installed between the KE reactor and the Columbia River, are now available. Anomalous values were observed in samples from 199-K-141.
  - Chromium concentrations in the first routine samples collected from 199-K-141 were in the range 240~260 ug/L; these concentrations were confirmed by re-sampling the well. There are no known chromium sources in the vicinity of the well, and other wells located immediately upgradient do not show evidence for chromium contamination.
  - Other anomalous results for the sample from 199-K-141 include pH (low); chloride (high), and sodium (high). A summary of selected results is presented in the table below.
- Reporting:
  - Draft report for the K-Basins quarterly report for April, May, and June 2007 is in preparation.

Constituent	199-K-141	199-K-142	199-K-32A[2]
Carbon-14 (pCi/L)	69	227	210
Chloride (ug/L)	23,700	2,900	18,770
Chromium (ug/L)[1]	245 (251)	8	17
Gross alpha (pCi/L)	4		2
Gross beta (pCi/L)	10	4	13
Nitrate (ug/L)	24,800	3,540	23,463
pH Measurement (pH)	7.28	8.01	7.91
Sodium (ug/L)	15,600	9,050	7,478
Specific conduct (uS/cm)	633	247	353
Tritium (pCi/L)	4,500	377	36,695

(1) Chromium result was confirmed by re-analysis at the Lab (ICP), and also by re-sampling and Hach analysis. All metals results are for filtered samples. Results in blue are considered anomalous, i.e., possibly not representative of aquifer conditions.

(2) Results for K-32A are averages for 1/1/2000 to 7/6/2007.

100-HR-3 Groundwater OU - Ron Jackson

- Remediation Treatment Status
  - For the period June 1-30, 2007:
    - The system operated normally.
    - Total average flow through the system was approximately 188 gpm. Extraction well 199-H4-3 experiencing sanding problems which will required replacing the pump.
    - Average influent hexavalent chromium concentration for H Area was approximately less than 0.016 mg/L.
    - Average influent hexavalent chromium concentration for D Area was approximately 0.072 mg/L.
- DR-5 Treatment Status
  - For the period June 1-30, 2007:
    - System operated normally.
    - Total average flow was approximately 38 gpm.
    - The average influent hexavalent chromium concentration was approximately 0.687 mg/L.
  - "Horn" Investigation
    - Request addition of receipt of email, From John Price (Ecology) to Jim Hanson (RL), dated June 26, 2007, documenting Ecology approval to start work for the Horn Investigation SAI.
    - Planning is underway to initiate drilling in August, 2007.
    - Tribes have walk downed the 21 proposed well locations and some of the proposed aquifer tubes. Based on the walkdown several of the in FY07 well locations will require full cultural review and archeological excavation. In accordance with the SAI, RL proposes substituting planned FY08 wells for FY07 wells to maintain schedule while culturally sensitive sites are being cleared.

- Summary of ISRM Status
  - Chromium concentrations in groundwater sampled from select ISRM injection wells are about the same as those collected last June.
  - The ISRM annual report has been released.
- EM-22 Technology Developments
  - Injecting micron-size iron into selected ISRM boreholes: MSE-Technology Applications has prepared a new schedule and budget for evaluating alternative iron compounds for injection. The field test, originally scheduled for July, 2007, will be postponed.
  - EC Treatability Test-Continue in batch mode to refine the effluent treatment system to ensure iron concentration remains below action levels. Subcontractor investigating other chemical for effluent treatment.
  - The seven chromium source investigation is being sampled for hexavalent chromium every other week. Four new wells are being planned to further refine the chromium source in this area.
  - EM-20 has indicated that they will support a chromium source investigation for the northwest 100-D plume.
  - Well drilling is proceeding at the biostimulation test site in 100-D.

300-FF-5 Operable Unit—Bob Peterson and Ron Smith (PNNL)

- Operations and Maintenance Plan Activities
  - 300 Area Sampling and Analysis: No new information to report.
  - Semi-Annual June Sampling Event: Sampling at the 300 Area started the week of June 4 and was complete by late June. Results are expected by the end of July/early August.
  - 618-10 and 618-11 Subregions: The most recent results are for samples collected in late April/early May 2007 at each of these 300-FF-5 subregions. Results are on trend and within expected ranges.
- Phase III Feasibility Study
  - Technology Screening and Remedial Action Alternatives: No new information to report.
  - Conceptual Site Model Report: Continuing to develop draft text on current conditions, hydrogeologic framework, groundwater flow modeling, and geochemistry considerations related to uranium mobility.
  - Groundwater Flow Model: The 3-D flow model developed for the 300 Area uranium plume is being used to anticipate direction of flow and travel times to the river, for various hypothetical uranium source locations. Locations currently being investigated are the south end of the 300 Area Process Trenches, the southern portion of the South Process Pond, and immediately to the south of the 307 Process Trenches. Following the spring seasonal high water table, groundwater movement is directed easterly and travels at velocities reaching tens of meters per day (i.e., several weeks travel time to the river).
- Other Activities
  - VOC Investigation: Preparations are underway to drill three additional characterization boreholes starting in July as part of this investigation.
  - Treatability Testing (EM-22): Polyphosphate injection occurred during June 2007 and subsequent monitoring for impacts on uranium in the aquifer is underway.

100-BC-5 Operable Units—Mary Hartman

- All FY 2007 sampling outlined in the groundwater SAP is complete. When new wells are installed at 100-C-7, we will add them to the sampling schedule (hexavalent chromium, alpha/beta, tritium, and general chemistry).

100-FR-3 Operable Unit—Mary Hartman

- All FY 2007 sampling is complete. No activities to report.

Attachment 2

(2)

The 100-KR-4 Pump and Treat Expansion Summary Package

July 12, 2006

CONCURRENCE PAGE

Title: **The 100-KR-4 Pump and Treat Expansion Summary Package**

Concurrence: **Briant L. Charboneau, Federal Project Director**
U. S. Department of Energy, Richland Operations Office

James P. Hanson for — 7/12/07
Signature **Date**

Larry E. Gadbois, Project Manager
U. S. Environmental Protection Agency

Larry Gadbois — 7-12-2007
Signature **Date**

The 100-KR-4 Pump and Treat Expansion Summary Package

Purpose: Expand the existing pump and treat network in the 100-KR-4 operable unit to address changes in plume geometry since the start of operations in 1997. A regulatory driver for this action is *The Second CERCLA Five Year Review Report for the Hanford Site,* DOE/RL-2006-20, which included a 100 gpm increase in capacity to the 100-KR-4 treatment system as Action Item 5-1.

This package provides the preliminary locations of additional extraction and injection wells to support expansion of the 100-KR-4 pump and treat network. The Department of Energy (DOE/RL) is seeking early concurrence on these locations to provide timely planning and construction of these wells in 2007 and 2008.

Background

Initial Pump and Treat Network

- 1997: The KR-4 pump and treat network began operations. It consisted of six extraction wells, five compliance wells, and four injection wells. The target area included the area between the 116-K-2 trench and the Columbia River.
- Nine aquifer sampling tubes were installed along the shoreline from the KW Reactor area to the boundary with the 100-NR-2 Operable Unit.
- System treatment capacity was 300 gpm.

Subsequent Modifications to the Pump and Treat Network

- 1998: Extraction well 199-K-125A replaced extraction well 199-K-118A, which had been plagued with heavy silt inflow and had never operated properly.
- 1999: Added compliance well 199-K-126 to monitor movement of the plume toward the 100-N area
- 2002: Extraction well 199-K-127 was added to improve capture between existing extraction wells 199-K-119A and a 199-K-120A
- 2003: Compliance well 199-K-126 was converted to an extraction well, added monitoring well 199-K-130 to monitor chromium approaching 100-NR-2, and replaced extraction well 199-K-112A with extraction well 199-K-129.
- 2004: Converted compliance well 199-K-114A to an extraction well to improve capture where chromium concentrations were high in aquifer sampling tubes 22 and 23. Added monitoring well 199-K-131 to monitor chromium closer to the 100-NR-2 area. Added aquifer sampling tubes AT-K-1 through AT-K-6.
- 2005: Added monitoring well 199-K-132 downgradient of the KW reactor. Utilized extraction well 199-K-126 in a calcium polysulfide treatability test. Detected 44 ug/L hexavalent chromium in aquifer tube AT-K-1 downgradient of the KW Reactor.
- 2006: Installed monitoring well 199-K-143 to provide a sampling point to assess the inland extent of the hexavalent chromium plume between former extraction well 199-K-126 and monitoring well 699-78-62. The fall 2006 chromium concentration in this well was about 20 ug/L, and the data confirmed the

feasibility of the proposed injection well locations for the for the upcoming pump-and-treat expansion.

- 2006: Conducted walk-down with Tribal representatives to discuss conceptual design of pump-and-treat expansion and discuss proposed well and building locations. Incorporated minor changes to proposed locations based on Tribal input.
- 2006-2007: Designed and constructed stand alone pump and treat system around the KW reactor. System includes four extraction wells and two injection wells. Currently treating about 100 gpm . The system capacity can be increased to 200gpm. Building this system has satisfied the requirements of DOE/RL -2006-20 Action Item 4-1 prior to the August 2008 implementation date.
- 2007: Conducted a second walk-down of conceptual well locations with Tribal representatives; their input resulted in adjustments to well locations of up to about 30 feet from the flagged locations used in the simulation.

Planned KR-4 System Expansion

- **Objectives**

1. Stop the northward migration of the hexavalent chromium before it reaches the 100-NR-2 OU.
2. Protect the Columbia River by removing remaining high concentration areas and enhancing capture between extraction wells.
3. Remediate the remainder of the plume to below the 22 ug/L Remedial Action Objective fully utilizing the available treatment capacity within operational limitations.

- **Implementation Steps**

  - Conceptually locate extraction and injection wells and conduct an analytical simulation to optimize well locations to achieve objectives listed above. This simulation is included in this package as Figure 1.
  - Conduct a walk-down with Tribal representatives to receive concurrence with proposed well locations or modify the locations to satisfy cultural sensitivities.
  - Receive preliminary concurrence on the conceptual design from the USEPA and WDOE.
  - Prepare a supplement to the Remedial Design Report and Remedial Action Work Plan. (DOE/RL-2006-75). The annotated outline for this report is included in this package as Attachment 1. The total treatment capacity of this new system will be 600 gpm.
  - Drill 18 new wells in 2007 and 2008. Some wells will be installed as dual purpose monitoring wells that can be converted to extraction or injection wells as needed.

- Hook up six extraction wells and four injection wells by August 2008. These wells will be located to address objectives 1 and 2 in the northern portion of the hexavalent chromium plume. The initial treatment capacity will be 300 gpm and will satisfy DOE/RL-2006-20 Action Item 5-1.
- Flow rate estimations for the simulation were the minimum to obtain capture. Actual operational flow rates are expected to be higher in some wells based on adjacent extraction well production rates, specific capacity from well development drawdown tests, and aquifer thickness, where available. Simulated extraction and injection rates are as follows:
  Extraction wells: K-130, K-131, K-148, and K-149 = 40 gpm; K-147 = 20 gpm, and XE4= 25 gpm
  Injection wells: K-154, K-155, XI1, and XI2= 50 gpm.
- Hook up additional extraction and injection wells as required to address objectives 2 and 3 in the southern portion of the plume.
- Optimization plume capture utilizing KR-4 and K Expansion Pump-and-Treat systems.
- Increase treatment capacity to 600gpm, if necessary.

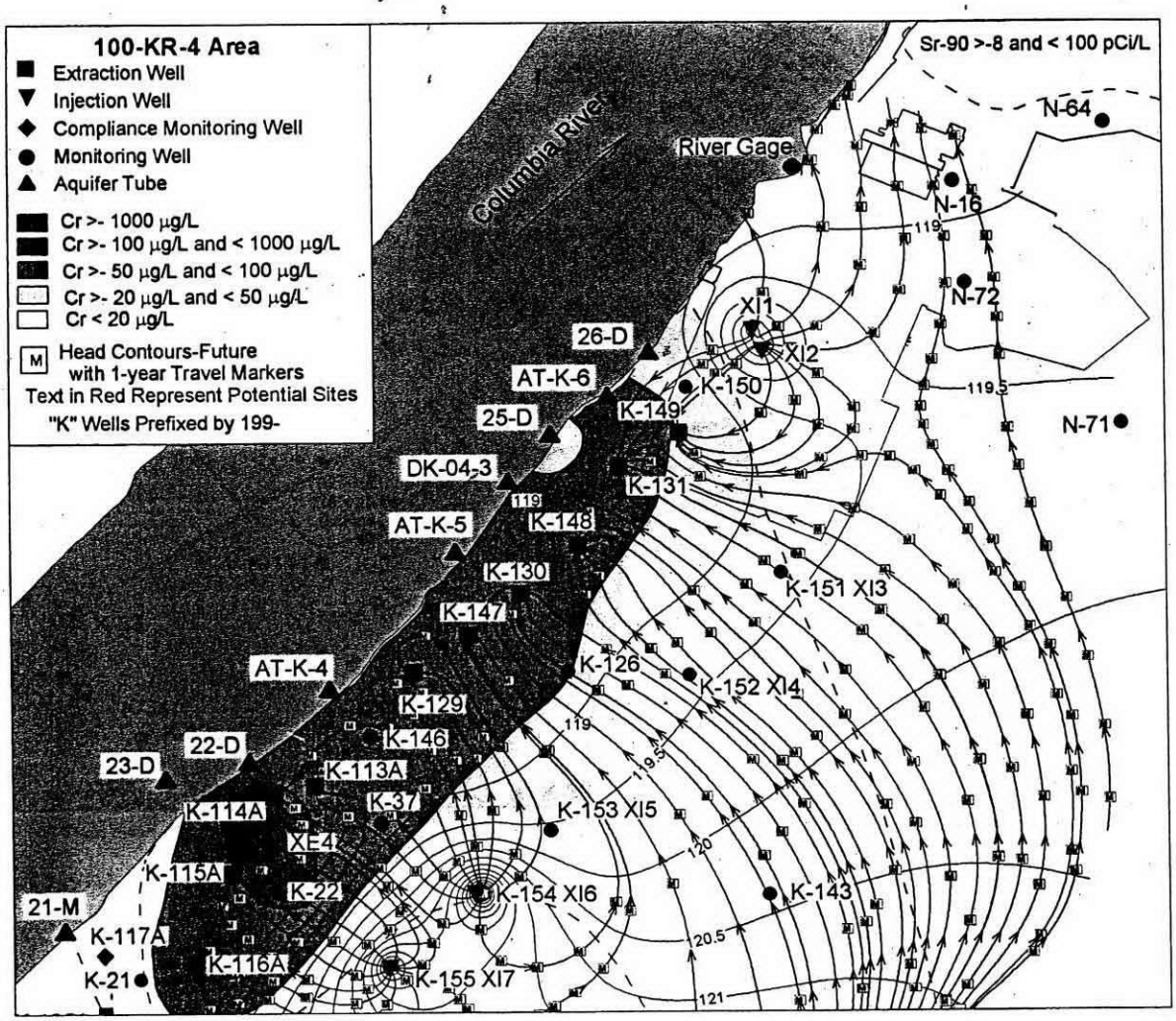
- **Analytical Simulation.**

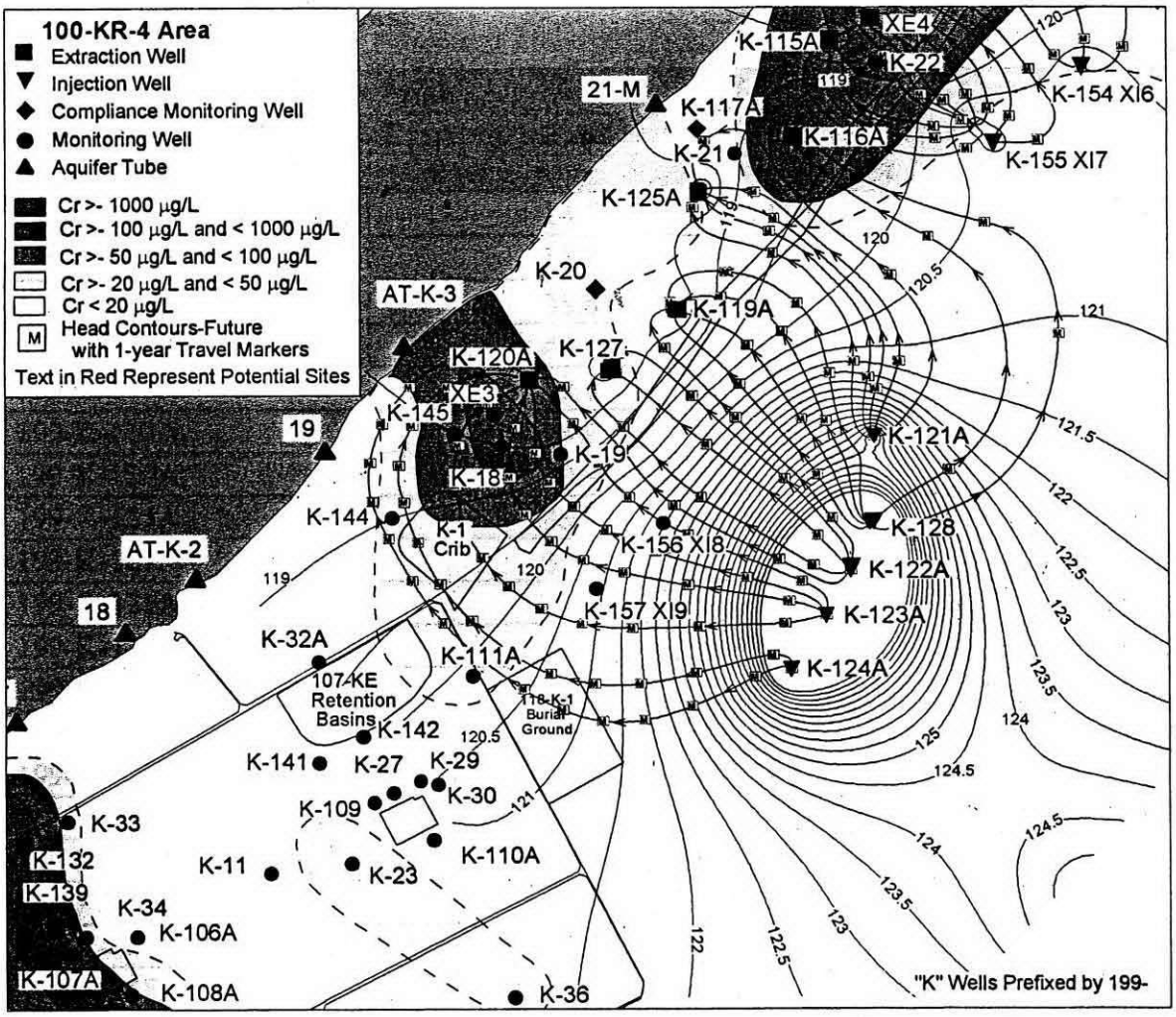
The locations of the six new extraction wells and four new injection wells were selected to meet the objectives of stopping northward migration of the hexavalent chromium plume, and filling gaps in capture in the existing extraction well network. To do so, an analytical hydraulic model was used to optimize well locations and verify plume capture. The simulated extraction rates and well locations appear to contain the northern part of the contaminant plume (Figures 1 and 2). The total simulated extraction rate was 205 gpm; however, the actual rate is expected to vary based on aquifer conditions encountered after well installation.

The remaining new wells, which will not be hooked up initially, will be monitored to determine the effectiveness remediation activities and changes in the plume distribution. These wells can be converted later to extraction and injection wells, as needed, to achieve the goals of the pump and treat expansion. These wells are mostly located in the southern part of the 100-KR-4 hexavalent chromium plume.

The northern most injection wells, XI1 and XI2, are expected to provide a hydraulic barrier to northward plume migration, i.e., maintain separation between the 100-KR-4 hexavalent chromium plume and the 100-NR-2 strontium-90 plume. Injection of water into these wells should slightly increase the gradient between the injection wells and the 100-N area. Since this water has been treated to remove hexavalent chromium it should have little influence on the groundwater chemistry in the 100-NR-2 area.

Figure 1: The Steady State Capture Analysis for the Expansion of the 100-KR-4 Pump and Treat Network (2 Pages)




100-KR-4 Area
Extraction Well
Injection Well
Compliance Monitoring Well
Monitoring Well
Aquifer Tube
Cr >- 1000 µg/L
Cr >- 100 µg/L and < 1000 µg/L
Cr >- 50 µg/L and < 100 µg/L
Cr >- 20 µg/L and < 50 µg/L
Cr < 20 µg/L
M Head Contours-Future with 1-year Travel Markers
Text in Red Represent Potential Sites
XE4
K-115A
K-22
K-154 XI6
21-M
K-117A
K-116A
K-155 XI7
K-21
K-125A
K-20
AT-K-3
K-119A
K-120A
K-127
XE3
K-145
19
K-121A
K-19
K-18
K-144
K-1 Crib
K-156 XI8
K-128
AT-K-2
K-122A
18
K-157 XI9
K-123A
K-32A
K-111A
K-124A
107-KE Retention Basins
118-K-1 Burial Ground
K-142
K-141
K-27
K-29
K-30
K-109
K-33
K-110A
K-132
K-11
K-23
K-139
K-34
K-106A
K-107A
K-108A
K-36
"K" Wells Prefixed by 199-

The pumping rates are as follows:

Well	Model Analysis, Nov. 2006	
	Extraction Rate (GPM)	Injection Rate (GPM)
199-K-129	14.7	—
199-K-113A	13.3	—
199-K-114A	38.6	—
199-K-115A	40.2	—
199-K-116A	37.7	—
199-K-119A	24.9	—
199-K-120A	49.9	—
199-K-125A	35.6	—
199-K-127	31.5	—
199-K-121A	—	42.9
199-K-122A	—	78.5
199-K-123A	—	62.1
199-K-124A	—	24.3
199-K-128	—	78.1
Expansion Wells		
199-K-130	40	
199-K-131	40	
199-K-147	20	
199-K-148	40	
199-K-149	40	
199-K-XE4	25	
199-K-XI1		50
199-K-XI2		50
199-K-154		50
199-K-155		50

Attachment 3

APPENDIX A*

100-NR-2 WELLS

(This list will be updated as necessary, presented at the 100 Areas Unit Manager's Meeting, and included in the UMM minutes)

Shading indicates wells added for this change.

199-N-103A	199-N-104A	199-N-105A
199-N-106A	199-N-14	199-N-16
199-N-18	199-N-19	199-N-2
199-N-21	199-N-22	199-N-26
199-N-27	199-N-28	199-N-29
199-N-3	199-N-32	199-N-34
199-N-41	199-N-42	199-N-49
199-N-50	199-N-51	199-N-52
199-N-57	199-N-59	199-N-62
199-N-64	199-N-67	199-N-70
199-N-71	199-N-72	199-N-73
199-N-74	199-N-75	199-N-76
199-N-77	199-N-80	199-N-81
199-N-8S	199-N-92A	199-N-96A
199-N-99A	199-N-122	199-N-123
199-N-126	199-N-127	199-N-128
199-N-129	199-N-130	199-N-131
199-N-136	199-N-137	199-N-138
199-N-139	199-N-140	199-N-141
199-N-142	199-N-143	199-N-144
199-N-145	199-N-146	199-N-147
199-N-148	199-N-149	199-N-150
199-N-151	199-N-152	199-N-153
199-N-154	199-N-155	199-N-156

100-NR-2 AQUIFER TUBES

Well ID	Tube Name	Well ID	Tube Name
C5514	N116mArray-0A[1]	C5269	APT-1[1]
C5255	N116mArray-1A	C5270	APT-2[1]
C5256	N116mArray-2A	C5271	APT-3[1]

*Revised App. A Well List was Presented at the 100 Area Unit Manager's Meeting on July 12, 2007

100-NR-2 AQUIFER TUBES (Continued)

Well ID	Tube Name
C5257	N116mArray-3A
C5258	N116mArray-4A
C5245	NVP1-1
C5246	NVP1-2
C5247	NVP1-3
C5248	NVP1-4
C5249	NVP1-5
C5250	NVP-116.3
C5251	NVP-116.0
C5252	NVP-115.7
C5253	NVP-115.4
C5254	NVP-115.1
C5386	APT-5[1]

Well ID	Tube Name
C5259	N116mArray-6A
C5260	N116mArray-7A
C5261	N116mArray-8A
C5262	N116mArray-8.5A[1]
C5263	N116mArray-9A
C5264	N116mArray-10A
C5265	N116mArray-11A
C5266	N116mArray-12A
C5267	N116mArray-13A
C5268	N116mArray-14A
C5512	N116mArray-15A[1]
C5513	N116mArray-16A[1]

[1]Tube not listed in *100/300 Areas Aquifer Tube Sampling and Analysis Instruction for Fiscal Year 2007, Hanford Site, Washington*, SGW-32647, Rev. 0, to be revised for Fiscal Year 2008.

*Revised App. A Well List was Presented at the 100 Area Unit Manager's Meeting on July 12, 2007

Attachment 4

Attachment to July UMM (9)
Page 1 of 2

SGW-33224
Revision 0

Sampling and Analysis Instructions for Investigating Chromium Groundwater Contamination in the 600 Area Between 100-D and 100-H

Prepared for the U.S. Department of Energy
Assistant Secretary for Environmental Management

Project Hanford Management Contractor for the
U.S. Department of Energy under Contract DE-AC06-96RL13200

FLUOR.
P.O. Box 1000
Richland, Washington

Approved for Public Release;
Further Dissemination Unlimited

Attachment 1 to July UMH
Page 2 of 2

SGW-33224, Rev. 0

CONCURRENCE PAGE

Title: SAMPLING AND ANALYSIS INSTRUCTION FOR INVESTIGATING CHROMIUM GROUNDWATER CONTAMINATION IN THE 600 AREA BETWEEN 100-D AND 100-H

Concurrence: Briant L. Charboneau, Federal Project Director
U.S. Department of Energy, Richland Operations Office

Signature — Date: 6-28-2007

John Price, Project Manager
Washington State Department of Ecology

Signature — Date: 6-28-2007

Jackson, Ronald L

From: Price, John (ECY) [Jpri461@ecy.wa.gov]
Sent: Tuesday, June 26, 2007 9:39 AM
To: Hanson, James P
Cc: Jackson, Ronald L; Raidl, Robert F; Winterhalder, John A; Borghese, Jane V; Goswami, Dibakar; Shea, Jacqueline (ECY)
Subject: RE: Approval to commence Horn Investigation SAI

As stipulated in Section 7.3.2 of the TPA Action Plan, "near-surface vadose zone sampling activities may commence after 2 weeks following the receipt of comments from the lead regulatory agency on the initial draft of the RI/FS work plan if comments from the lead regulatory agency regarding vadose zone sampling have been resolved." As Ecology TPA Project Manager for the 100-HR-3 operable unit, I determined that all comments regarding vadose zone sampling have been resolved, for the Horn Investigation Sampling and Analysis Instruction. Therefore, DOE may commence work under this instruction and an Ecology-approved Waste Control Plan.

Please ensure that this approval to start work is documented in the next 100 Area Unit Manager Meeting minutes.

From: Shea, Jacqueline (ECY)
Sent: Monday, June 25, 2007 4:38 PM
To: Hanson, James P
Cc: Jackson, Ronald L; Raidl, Robert F; Winterhalder, John A; Borghese, Jane V; Goswami, Dib (ECY); Price, John (ECY)
Subject: RE: Horn Investigation SAI and Comments

Jim,

The changes look good. I will have John send out an email to approve the start of work. He will sign the signature page when we get it. Thanks,

Jacqui

From: Hanson, James P [mailto:James_P_Hanson@RL.gov]
Sent: Monday, June 25, 2007 8:15 AM
To: Shea, Jacqueline (ECY)
Cc: Jackson, Ronald L; Raidl, Robert F; Winterhalder, John A; Borghese, Jane V; Goswami, Dib (ECY)
Subject: FW: Horn Investigation SAI and Comments
Importance: High

Jacqui,

Please find attached three (3) files:

1.) SGW-33224 Draft-A 6-18-07 for submittal.doc (CLEAN COPY)
2.) SGW-33224 Draft-A 6-18-07 with Ecology resolution changes marked.doc (MARKED COPY)

3.) 06-20-07 Horn Area SAI Comment Responses Table.doc (COMMENT RESOLUTION)

Once you have given me the "OK" for the changes we discussed FH will produce a signature copy for FH, DOE, and Ecology to sign off on the document (see documents above for your review). Hopefully, we can take care of this within the next couple of days. An Email providing approval to perform the work from John would be great to cover us until we get the document "officially" approved.

Thanks,

JPH
373-9068

From: Jackson, Ronald L
Sent: Monday, June 25, 2007 6:58 AM
To: Hanson, James P
Cc: Raidl, Robert F; Jackson, Ronald L; Winterhalder, John A; Borghese, Jane V
Subject: FW: Horn Investigation SAI and Comments
Importance: High

Jim,

Here is the SAI with the attached redline which incorporates Ecology's latest comments. I also included the SAI with out redlines (not as messy). I also fixed the comment responses per your suggestion. Please send to Jacqui for her concurrence.

If you have any questions, please give me a call.

Ron Jackson
430-8256

Attachment 5

100-B/C Area Field Remediation Status
Unit Manager's Meeting 7/12/07

118-B-1/118-C-1 Anomalies Characterization

- 25 remaining unopened/uncharacterized anomalous items at 118-B-1; characterization expected to be performed late July.

Characterization/Shipment of SNF from 118-B-1 and 118-C-1

- PSSD (formerly known as the SARP) to allow the shipment of the SNF material to K-Basins in final processing for issuance to DOE review.

118-B-1

- Completed all soil loadout.
- ESD (deep vadose zone tritium) to support interim site closure in-process.

118-C-1

- Re-vegetation planned for fall FY07.

116-C-3

- Plan full-scale mock-up in the northern (clean) tank in early August.

100-B-27

- Completed soil removal to approximately 15 ft bgs.
- Characterization pothole indicates that hexavalent chromium contamination continues at a relatively consistent concentration to at least 35 ft bgs.

1607-B1

- RSVP for a No Action reclassification is in development.

100-B-18

- Load-out of soil and mastic material completed; preliminary results of verification sampling indicates that RAOs have been met.
- Removal of some light tubes and associated sampling in-progress.

100-B-19

- Continuing excavation of sulfate-stained soils and garnet sands.

100-B-21

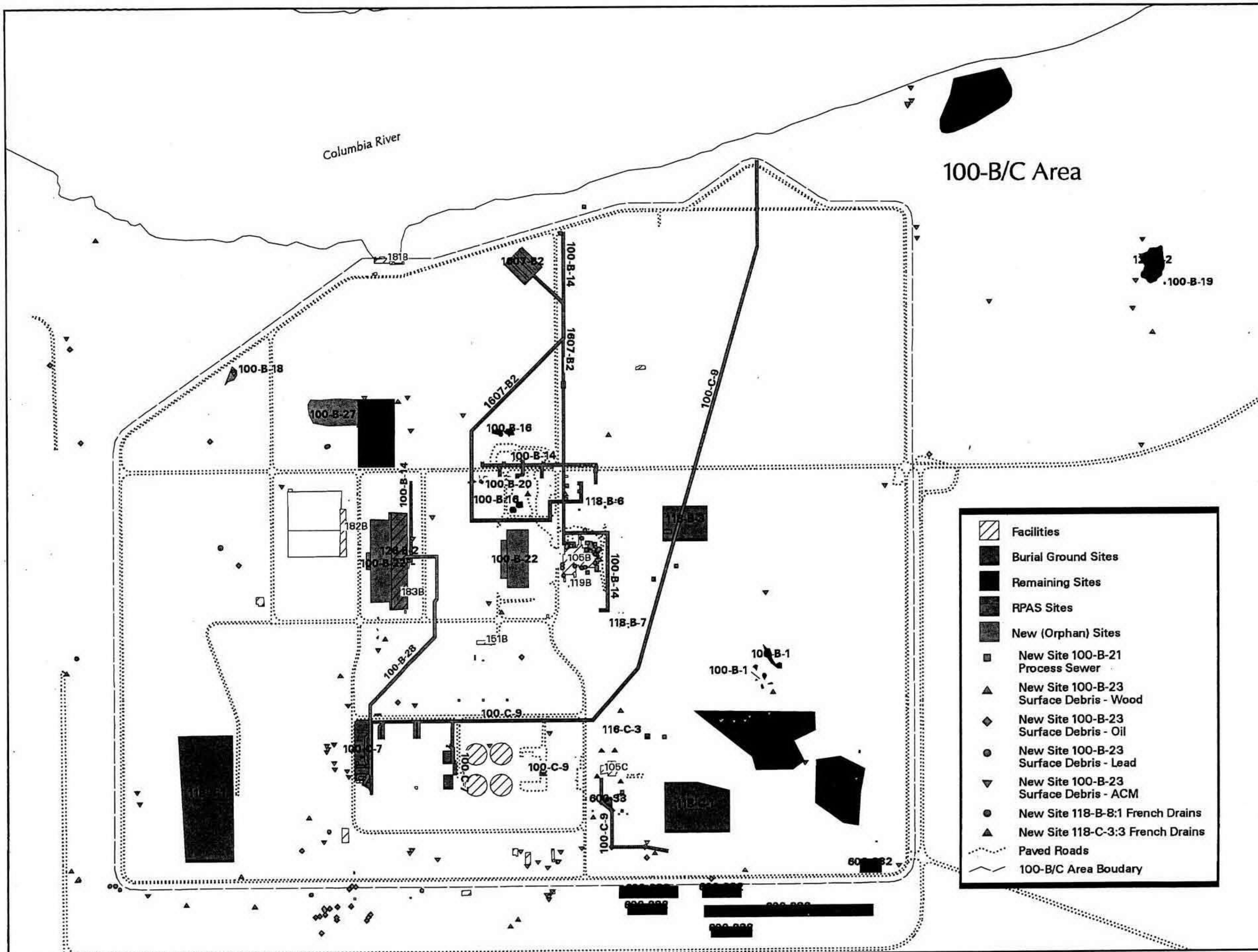
- Load out of DS-100BC-002 (pipeline north of former retention basins) complete, pending verification sampling.
- Performing additional geophysical characterization to determine extent of DS-100BC-019 (east of 105-B). Load out of known portions completed.

100-B-23

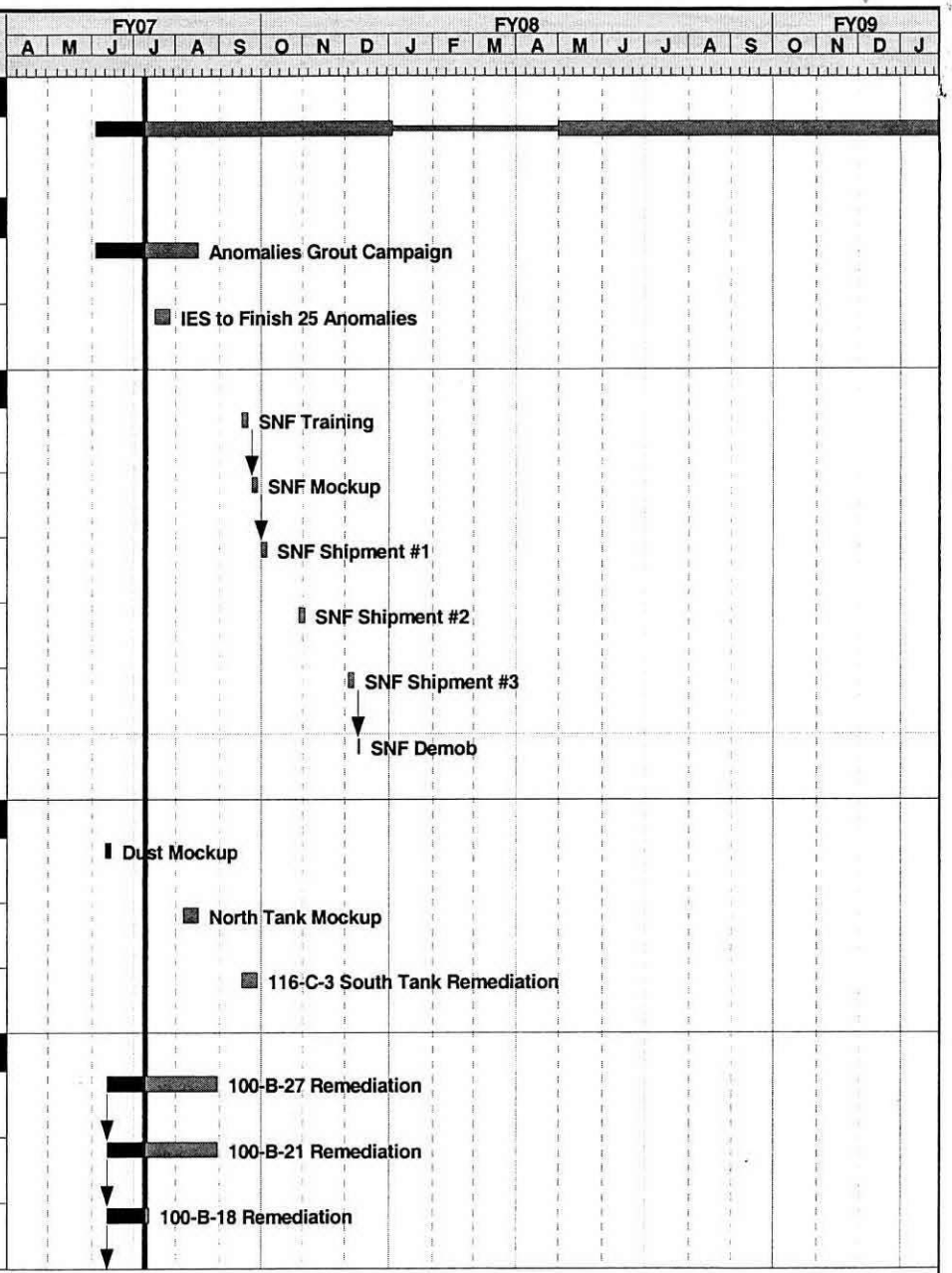
- Continuing cleanup. This site is a collection of multiple pieces of debris scattered across the 100-BC area.

100-C-7

- Expect to begin mobilization of drilling equipment for additional characterization boreholes and monitoring well installation week of 7/16.


100-B/C Area
Columbia River
181B
1607-B2
100-B-14
1607-B2
100-C-9
100-B-18
100-B-19
100-B-27
100-B-16
100-B-14
100-B-20
100-B-16
118-B-6
182B
183B
100-B-22
105B
119B
100-B-14
118-B-7
151B
100-B-28
100-B-1
100-B-1
100-C-9
116-C-3
100-C-7
100-C-9
105C
600-33
100-C-9
Facilities
Burial Ground Sites
Remaining Sites
RPAS Sites
New (Orphan) Sites
New Site 100-B-21 Process Sewer
New Site 100-B-23 Surface Debris - Wood
New Site 100-B-23 Surface Debris - Oil
New Site 100-B-23 Surface Debris - Lead
New Site 100-B-23 Surface Debris - ACM
New Site 118-B-8:1 French Drains
New Site 118-C-3:3 French Drains
Paved Roads
100-B/C Area Boudary

Activity ID	Activity Description	Orig Dur	Rem Dur	Early Start	Early Finish
100BC Area 2007 Scope					
Total		382	362	04JUN07A	31MAR09
Anomalies					
1100	Anomalies Grout Campaign	25	24	04JUN07A	16AUG07
1070	IES to Finish 25 Anomalies	8	8	16JUL07*	26JUL07
SNF Shipment					
1120	SNF Training	4	4	17SEP07*	20SEP07
1130	SNF Mockup	4	4	24SEP07	27SEP07
1140	SNF Shipment #1	4	4	01OCT07	04OCT07
1150	SNF Shipment #2	4	4	29OCT07*	01NOV07
1160	SNF Shipment #3	4	4	03DEC07*	06DEC07
1170	SNF Demob	1	1	10DEC07	10DEC07
116-C-3					
1110	Dust Mockup	4	0	11JUN07A	14JUN07A
1060	North Tank Mockup	8	8	06AUG07*	16AUG07
1090	116-C-3 South Tank Remediation	8	8	17SEP07*	27SEP07
Remediation					
1000	100-B-27 Remediation	29	32	12JUN07A	30AUG07
1010	100-B-21 Remediation	29	32	12JUN07A	30AUG07
1020	100-B-18 Remediation	29	4	12JUN07A	12JUL07



Start Date	01JAN07
Finish Date	31MAR09
Data Date	09JUL07
Run Date	12JUL07 08:19

Early Bar
Progress Bar
Critical Activity

LOOK

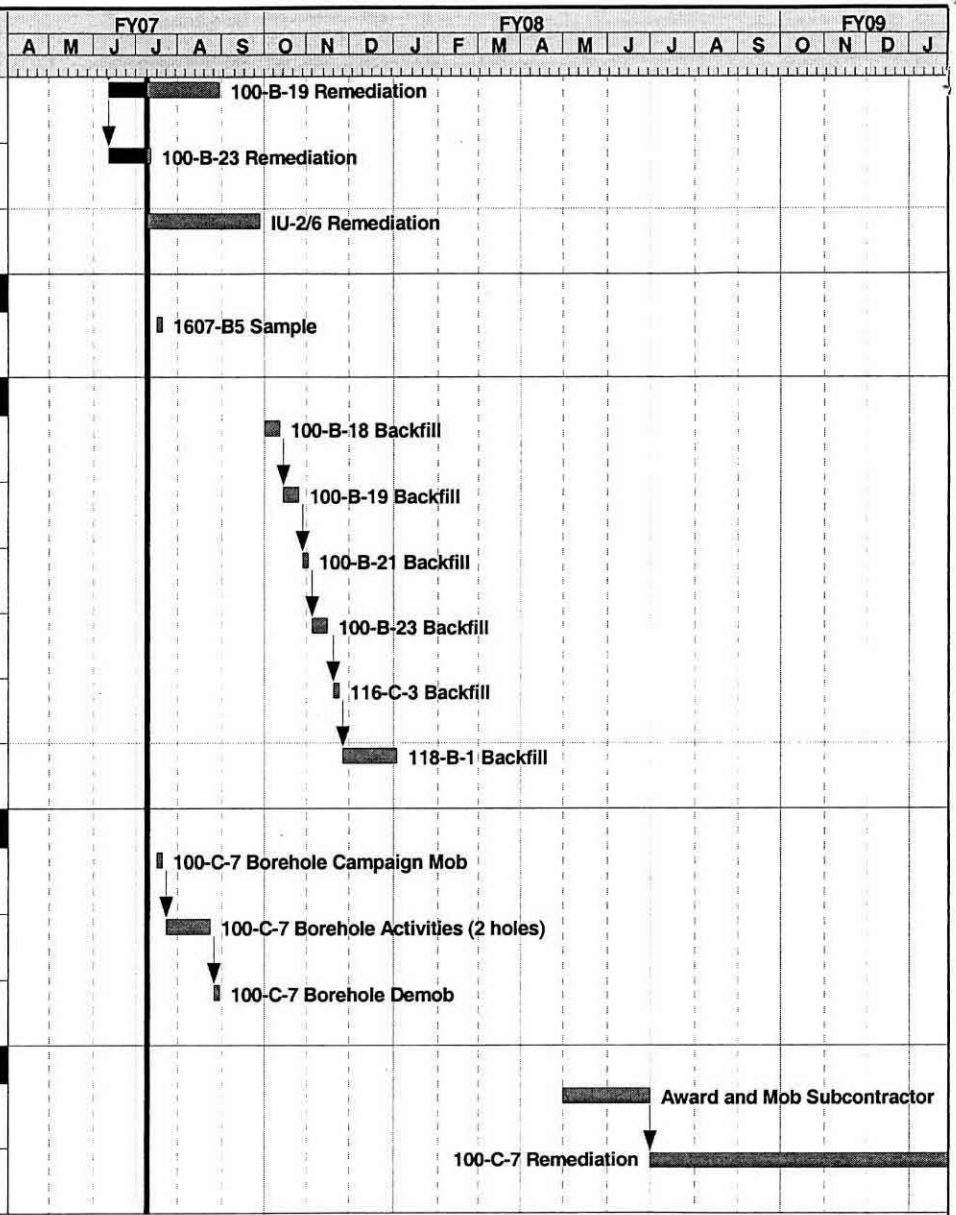
WCH

Schedule of Activity

Classic Schedule Layout

Date	Revision	Checked	Approved

Activity ID	Activity Description	Orig Dur	Rem Dur	Early Start	Early Finish
1040	100-B-19 Remediation	29	32	12JUN07A	30AUG07
1050	100-B-23 Remediation	29	4	12JUN07A	12JUL07
1080	IU-2/6 Remediation	48	48	09JUL07	27SEP07
Sample					
1030	1607-B5 Sample	4	4	16JUL07*	19JUL07
Backfill					
1210	100-B-18 Backfill	8	8	01OCT07*	11OCT07
1220	100-B-19 Backfill	8	8	15OCT07	25OCT07
1200	100-B-21 Backfill	4	4	29OCT07	01NOV07
1230	100-B-23 Backfill	8	8	05NOV07	15NOV07
1240	116-C-3 Backfill	4	4	19NOV07	22NOV07
1180	118-B-1 Backfill	24	24	26NOV07	03JAN08
100-C-7 Boreholes					
1290	100-C-7 Borehole Campaign Mob	4	4	16JUL07*	19JUL07
1300	100-C-7 Borehole Activities (2 holes)	20	20	23JUL07	23AUG07
1310	100-C-7 Borehole Demob	3	3	27AUG07	29AUG07
100-C-7					
1250	Award and Mob Subcontractor	34	34	01MAY08*	30JUN08
1260	100-C-7 Remediation	157	157	01JUL08	31MAR09



Start Date	01JAN07
Finish Date	31MAR09
Data Date	09JUL07
Run Date	12JUL07 08:19

Early Bar
Progress Bar
Critical Activity

LOOK

WCH

Schedule of Activity

Classic Schedule Layout

Date	Revision	Checked	Approved

Attachment 6

(6)

300 Area D4 Status
July 12, 2007
100/300 Area Combined Unit Manager Meeting

Ongoing Hazardous Material Removal

- **321**
- **324**
- **327**
- **328**
- **337**
- **384**

Ready for Demolition:

- **3718E**
- **3745**
- **306W**
- **3746/3746A**

Demolition Activities:

- **3706/3706A** – demolished June 2007, load out is ongoing
- **3720** – demolition is ongoing
- **3720 BA** – demolished June 2007

60-Day Project Look Ahead

- Begin demolition of 328/328A, 3745, 3746/3746A
- Begin hazardous material removal at 308

Attachment 7

(7)

100 Area D4 Status
July 12, 2007
100/300 Area Combined Unit Manager Meeting

Ongoing Demolition Activities

- **163-N/183-N** – Above and below grade demolition complete at 163-N. 163-N sump remains to be removed. Below grade demolition at 183-N and load-out ongoing.
- **1312-N LERF** – Inlet piping, concrete apron and liner load-out ongoing.
- **107-N** – Resin removal and grouting complete, waste shipment to ERDF ongoing.
- **105-N** – Asbestos removal ongoing.
- **184-N/NA** - Hazardous material removal ongoing.
- **MO-050/MO-358** – Load-out ongoing.
- **B Reactor Roof Replacement** – Request for Proposal out for bid.
- **1705-N/NA and 1706-N/NA** - Load-out ongoing.

60-Day Project Look Ahead

- 182-N Asbestos/Hazardous waste removal.
- Remaining 1802N Pipe to be shipped to ERDF.
- MO-829 removal to ERDF.
- MO-055/MO-911 hazardous material removal and demolition.
- B Reactor Roof Replacement contract award, sub-contractor mobilization.

Attachment 8

July Unit Managers Meeting
Mission Completion Project –
July 12, 2007

Orphan Sites Evaluations and Long-Term Stewardship

- Addressing RL and Ecology comments on *100-D Area Orphan Sites Evaluation Report* (Draft A). Meeting to be scheduled with RL and Ecology to discuss comment disposition.
- 85% complete with 100-IU-6 Area field investigation. Anticipated completion is end of July. RL and regulator briefings for 100-UI-2 and 100-IU-2 will be scheduled in early Fall.
- Field Investigation for 100-H Area will be initiated in August.
- Historical review of 100-K Area will continue through August.
- RL and regulator briefing on design approach for Inter Areas evaluation will be scheduled in late July/August.

Risk Assessment

100/300 Area RCBRA Component

- The risk assessment document was transmitted to the agencies and public on 6/26/07. Review period through 8/8/07. Ecology has notified DOE of an extension for review until September 10. WCH is working with DOE to develop responses to early comments from EPA. A mid-review workshop will be held at the Ecology building on 7/25/07 to field questions from reviewers and hear any early feedback.

Inter-Areas

- Sampling activities are in progress – Amphibian surveys, avian surveys, and sample collection. Other activities coming up this spring and summer include collection of soil samples in T&E plant species habitat and collection of remaining sculpin samples. Data being transmitted to N&C for inclusion in risk assessment.

Columbia River Component

- Data gap report will be published in mid August, and will serve as a starting point be a tool for further discussions on the path forward for filling data gaps.

Attachment 9

(9)

WASHINGTON STATE DEPARTMENT OF ECOLOGY

EPA

July 12, 2007

John Sands, Project Manager
River Corridor Baseline Risk Assessment
U.S. Department of Energy
P.O. Box 550
Richland, WA 99352

Re: Additional Polychlorinated Biphenyl (PCB) Analysis for the 100 and 300 Area Component of the River Corridor Baseline Risk Assessment

Dear ~~Mr Sands~~ John:

In public workshops and meetings during the past several months, the U.S. Department of Energy (DOE) has informed us of poor detection limits it obtained in some of the data collected as part of the 100 Area and 300 Area Component of the River Corridor Baseline Risk Assessment (RCBRA). The regulators have not been informed as to why the analytical results did not attain the detection limits required as per the "100 Area and 300 Area Component of the RCBRA Sampling and Analysis Plan," Rev. 1, DOE/RL-2005-42, dated 2006. As you know, the Tri-Party Agreement, section 7.8 states that: "In the event that DOE fails to demonstrate to the lead regulatory agency that data generated pursuant to this Agreement was obtained in accordance with the QA/QC plans, DOE shall repeat sampling or analysis as required by the lead regulatory agency."

Analytical results for PCBs contained some very poor detection limits. DOE's document titled "Risk Assessment Report for the 100 Area and 300 Area Component of the River Corridor Baseline Risk Assessment," DOE/RL-2007-21, Draft A was provided to the regulators for review in late June. This document used half the detection or reporting limit from these samples when doing risk calculations which has led to non-useful risk assessment results.

The U.S. Environmental Protection Agency (EPA) and the Washington State Department of Ecology (Ecology) require DOE to perform re-sampling for PCB analysis for a subset of the impacted data and sites. As we review the risk assessment report and the data, we welcome the opportunity to discuss the re-sampling that is required. Please plan accordingly. If you have any questions please contact Larry Gadbois of EPA at 509-376-9884, or John Price of Ecology at 509-372-7921.

Sincerely,

John B. Price

Larry Gadbois

John Price
Environmental Restoration Project Manager
Nuclear Waste Program
Ecology

Larry Gadbois
RCBRA Project Manager
Hanford Project Office
EPA

cc: Jill Thomson, WCH
Administrative Record, 100 and 300 Area